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PATENT
Docket No.: 5055/40

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Antonio Gigola)
Serial No. : 09/482,046)
Cnfrm. No. : 6489)
Filed : January 13, 2000)
For : PROCEDURE AND PRESS FOR)
PRODUCING SCREENING AND)
HUMIDIFYING PANELS IN PARTICULAR)
FOR AVICULTURAL FACILITIES OR)
GREENHOUSES AND PANELS)
PRODUCED BY THIS PROCEDURE)

Examiner:
Alicia Chevalier

RECEIVED
APR 29 2003
App Unit 21772
GROUP 1700

REQUEST FOR RECONSIDERATION

U.S. Patent and Trademark Office
P.O. Box 2327
Arlington, VA 22202
Box:

Dear Sir:

In response to the November 22, 2002, office action, please reconsider the basis for the rejections set forth therein in view of the following remarks.

Applicant gratefully acknowledges the decision to rejoin claims 10-17 subject to the allowability of claim 7 from which the withdrawn claims depend. For the reasons noted below, applicant submits that claim 7 is allowable over the art of record and therefore claims 10-17 should be rejoined with pending claims 7-9.

The rejection of claim 7 under 35 U.S.C. § 103(a) for obviousness over U.S. Patent No. 3,415,502 to Munters ("Munters") in view of U.S. Patent No. 3,963,810 to Holmberg et al. ("Holmberg") is respectfully traversed.

Munters relates to a contact body for use in a heat exchanger. The contact body is formed of a synthetic plastic material and is provided with folded or corrugated layers

or sheets bearing against one another, with channels or passages penetrating from end to end. The channels or passages allow for both air and water to flow therethrough. Some of the embodiments disclosed in the specification have non-rectilinear channels (see, e.g., Figure 7 and col. 5, lines 23-30).

Holmberg also relates to a contact body for use in a heat exchanger. The contact body is formed of corrugated plates or foils formed of, e.g., metals, plastics, or impregnated cardboard. The channels formed in the corrugated plates or foils are exclusively rectilinear.

The U.S. Patent and Trademark Office ("PTO") has taken the position at page 4 of the outstanding office action that one of ordinary skill in the art would have been motivated to substitute the impregnated cardboard of Holmberg as the material used for the contact body of Munters to arrive at the presently claimed invention, "because Holmberg shows that plastics, metals, and impregnated cardboard are equivalent *for their use* in the art of cooling tower contact bodies..." (emphasis added).

Applicant respectfully disagrees for several reasons.

First, the PTO's position concerning the equivalency of plastics and cardboards is misplaced. The equivalency of plastics and cardboards, if any exists, is limited to their behavior in use (i.e., for allowing the desired interaction between fluids flowing through the cooling tower). However, Holmberg nowhere provides any suggestion that plastics and cardboard are or can be equivalent *in their physical and mechanical characteristics* (i.e., in their behavior during the manufacturing steps). It is common knowledge to those of ordinary skill in the art of cardboard manufacturing that cardboard is inextensible and, accordingly, it cannot be shaped with non-rectilinear channels using traditional methods without getting torn. The reasons why Holmberg suggests that cardboard or plastics can be used *in the device of Holmberg*, is because the contact body of Holmberg has rectilinear channels and therefore, notwithstanding the above-mentioned problems involved by cardboard manufacturing, the material used to form the panels did not affect the final result. Applicant submits that this reason alone allowed Holmberg to consider plastics and cardboard equivalents for use in the device disclosed therein. Thus, Holmberg does *not* suggest that plastics and cardboard are equivalents in all contact bodies.

For the foregoing reasons, it *cannot* be said that Holmberg suggests using cardboard to form a panel which is "formed from a plurality of cardboard sheets each having formed therein a plurality of *non-rectilinear* undulated channels," as recited in claim 7.

Second, the combined teachings fail to provide any expectation of success in being able to form a panel of claim 7 (i.e., formed from a plurality of cardboard sheets each having formed therein a plurality of *non-rectilinear* undulated channels). Nowhere in the prior art of record, let alone Munters or Holmberg, is there any teaching or disclosure of a manner of making a cardboard panel with non-rectilinear channels. As noted in the background of the invention at page 2 of the present application and as cited in the previously submitted response (filed July 16, 2002), techniques previously known in the art for forming undulated channels in cardboard are limited in their ability by only being able to form *rectilinear* undulated channels. The reason for this is that cardboard is not extensible. Because cardboard is not extensible, prior art techniques useful for forming channels in extensible materials would cause the cardboard to tear. It is precisely this deficiency in the art that the present application overcomes—providing a technique for preparing cardboard panels having formed therein a plurality of *non-rectilinear* undulated channels. Because neither Munters nor Holmberg teach how to make a product as presently claimed, the combined references cannot have allowed one of ordinary skill in the art to possess any expectation that success could be achieved in preparing a product as claimed.

For the above reasons, the combination of Munters and Holmberg provides neither motivation to use cardboard in forming a panel having *non-rectilinear* channels nor an expectation of successfully doing so. Absent such motivation or expectation of success supplied by the prior art, the PTO has failed to make a proper *prima facie* obviousness determination. Therefore, the rejection of claim 7 for obviousness over Munters and Holmberg is improper and should be withdrawn.

Despite the foregoing evidence that cardboard and plastics are not equivalent in their mechanical and physical properties as it relates to the claimed invention, should the PTO refuse to withdraw the rejection of claim 7 applicant respectfully requests that the PTO make statements on the record (i) clarifying the PTO's position concerning the extensibility of cardboard versus plastics and (ii) identifying where in the prior art a method is taught for forming *non-rectilinear* channels in cardboard.

The rejection of claims 8 and 9 under 35 U.S.C. § 103(a) for obviousness over Munters in view of Holmberg is respectfully traversed. Because claims 8 and 9 depend from claim 7, which is non-obvious over Munters and Holmberg for the reasons asserted above, the invention of claims 8 and 9 is likewise nonobvious over Munters and Holmberg.

Therefore, the rejection of claims 8 and 9 for obviousness over Munters and Holmberg is improper and should be withdrawn.

In view of all of the foregoing, applicants submit that this case is in condition for allowance and such allowance is earnestly solicited.

Respectfully submitted,

Date: April 23, 2003

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